

ABSTRACT OF THE DISCLOSURE

To solve a problem of non-uniform polishing properties of a circumferential surface area of a substrate, so-called edge sagging phenomenon. When a thin film formed on a top surface of the substrate is polished while holding a back surface of the substrate, local stress at a circumferential end of the substrate is reduced by a guide installed so as to surround the substrate. Also, a deformation of the outer circumferential end portion of the substrate is reduced by a recessed groove provided on the guide. Since a thin film formed on the surface can be polished to be flat throughout the surface of the substrate without an occurrence of non-uniform polishing properties of the outer circumferential surface area of the substrate, so-called edge sagging phenomenon, a high-performance semiconductor device can be manufactured at a high yield and low costs.